



United States
Department of
Agriculture

Natural Resources
Conservation Service

3737 Government Street
Alexandria, Louisiana
71302

July 26, 2002

Clay Menard
Project Manager
Coastal Restoration Division
P.O. Box 639
Abbeville, LA 70511-0639

Mr. Tom Podany
Chief, CWPPRA Program Manager
US Army Engineer District, New Orleans
P.O. Box 60267
New Orleans, Louisiana 70506

Gentlemen:

Re: PL-646 – TV-16
Cheniere Au Tigre Demonstration Project

The referenced project has been completed. Enclosed are a Project Completion Report and a copy of the As-Built drawings for the project.

Please direct any questions concerning this Project Completion Report to my attention at (318) 473-7791.

Sincerely,

/s/

Bradley A. Sticker, P.E.
Civil Engineer

Enclosure

cc: Bruce Lehto, ASTC/Water Resources, NRCS, Alexandria, LA (electronic distribution)
Britt Paul, Water Resources Planning Staff Leader, NRCS, Alexandria, LA (electronic distribution)
Dr. Bill Good, LDNR – CRD, Baton Rouge, LA (electronic distribution)
Garrett Broussard, LDNR-CRD Baton Rouge, LA (electronic distribution)
Ed Giering, State Conservation Engineer, NRCS, Alexandria, LA (electronic distribution)
Bart Devillier, District Conservationist, Abbeville, LA (electronic distribution)
Ralph Broome, Contracting Officer, NRCS, Alexandria, LA (electronic distribution)
Wayne Melancon, COTR, NRCS, Crowley, LA (electronic distribution)
Cherie LaFleur, Design Engineer, NRCS, Alexandria, LA (electronic distribution)
Ronnie Faulkner, Design Engineer, NRCS, Alexandria, LA (electronic distribution)

PROJECT COMPLETION REPORT¹

PROJECT NAME

Cheniere Au Tigre Demonstration Project

CWPPRA/STATE PROJECT NO.

TV-16

Report Date: July 5, 2002

BY: USDA - NRCS

1. Project Managers/Contracting Officer:

DNR Project Manager	Clay Menard	Telephone	(337) 893-3643
DNR Construction Project Manager	Clay Menard	Telephone	(337) 893-3643
DNR Monitoring Manager	Troy Barrilleaux	Telephone	(337) 898-1758
Federal Agency Project Manager	Mike Tullos	Telephone	(318) 473-7688
Federal Agency Contracting Officer	Ralph Broome	Telephone	(318) 473-7781

2. Location and description of projects as approved for construction by Task Force.

The Cheniere Au Tigre Demonstration Project is located along the shoreline of the Gulf of Mexico in southeastern Vermilion Parish. The approximate center of the project is at Latitude 29°35'30" and Longitude 92° 11'15". The project purpose is to reduce the wave energies that are eroding the shoreline on the Gulf of Mexico. The goal is to develop cost-effective structures that will reduce wave energies and trap sediment.

The project area is situated within the Cheniere Plain of southwestern Louisiana. This is a relatively large coastal ecosystem created by 5,000 years of sediment deposition from the Mississippi River. The soils that occur in the project area are classified as Coastal beach and Mermentau clay. The project area includes 139 acres of open water, brackish marsh, beach and scrub/shrub habitat.

The project purpose is to reduce the wave energies that are eroding the shoreline on the Gulf of Mexico.

3. Final, as-built features, boundaries and resulting acreage (use attachments if necessary).

The constructed project consists of six segmented rock breakwaters located approximately 200' off shore from the shoreline. The breakwaters are constructed of rock riprap meeting the ASTM D6092 gradation R-700 and are 200' in length with the top elevation at +3.5 NAVD 88. The exact locations and constructed dimensions of the project features can be seen in the attached "As Built" plans.

4. Key project cost elements

	CWPPRA Project Cost Estimates**	Cost Incurred as of Construction Completion
Construction	\$ 450,567.00	\$ 454,032.10
E & D	\$ 65,421.00	\$ 80,730.96
Landrights	\$ 20,540.00	\$ 8,388.00
Monitoring	\$ 64,729.00	\$ 3,591.00
O & M	\$ 4,100.00	\$ 5,233.00
Total	\$ 605,357.00	\$ 551,975.06

** Most recent estimate from CWPPRA Project estimates Report produced by USACOE.

5. Items of Work

Item No.	Work	Est. Quantity	Unit	Est. Unit Price	Est. Amount	Final Quant.	Bid Unit Price	Final Amount	% Over /Under
1	Mobilization and Demobilization	1	Job	L.S.	\$50,000.00	--	L.S.	\$70,000.00	
2	Rock Riprap	4600	Tons	\$50.00	\$230,000.00	5228	\$47.00	\$245,716.00	13.7%
3	Geotextile	4100	SY	\$5.00	\$20,500.00	4195	\$5.00	\$20,975.00	2.3%
4	Metal Fab & Installation Settlement Plates	10	EA	\$1000.00	\$10,000.00	10	\$2,000.00	\$20,000.00	0%

Additive A

5	Rock Riprap	920	Tons	\$50.00	\$46,000.00	964.8	\$47.00	\$45,345.00	4.9%
6	Geotextile	820	SY	\$5.00	\$4,100.00	839	\$5.00	\$4,195.00	2.3%
7	Metal Fab & Installation Settlement Plates	2	EA	\$1000.00	\$2,000.00	2	\$2,000.00	\$4,000.00	0%

Additive B

8	Rock Riprap	920	Tons	\$50.00	\$46,000.00	--	\$47.00	ADDITIVE B DELETED BY MODIFICATION #1	
9	Geotextile	820	SY	\$5.00	\$4,100.00	--	\$5.00		
10	Metal Fab & Installation Settlement Plates	2	EA	\$1000.00	\$2,000.00	--	\$2,000.00		

Original Est. Amount \$414,700.00

Original Bid Amount \$429,380.00

Modification #1

Reduced total contract by \$51,340.00 by deleting Additive B and added 521.6 tons riprap to breakwater #6 @ \$47.00 per ton for total of \$24,516.00. This additional rock at breakwater #6 is considered as overrun below.

Final Contract Amount \$434,747.00

6. Construction and construction oversight

Prime construction contractor	Bertucci Contracting Corp.
Subcontractor	None
Original construction contract	\$429,380.00
Change orders	-\$51,340.00
Over/Under runs	\$56,707.00
Final construction contract	\$434,747.00

Const. oversight contractor	N/A.	Final amt.	\$0.00
Cons. O.S./Admin. agency	NRCS	Est. amt.	

7. Major equipment used.

1266 Koehring hydraulic excavator on spud barge
2800 Linkbelt hydraulic excavator on spud barge
88 Bucyrus Erie dragline on spud barge

8. Discuss construction sequences and activities, problems encountered, solutions to problems, etc.

1. The contractor excavated the access channel
2. Light loaded rock barges in order to access the work site
3. Placed the geotextile fabric and pinned the fabric in place. The contractor worked placing the fabric for the breakwaters from the east to the west.
4. Complete placement of the rock to form the breakwaters. Completed the eastern most breakwater and progress westward.

9. Construction change orders and field changes.

Modification #1 deleted one breakwater (Additive B) which removed Items 8, 9, and 10, which removed \$51,340 from the contract. This breakwater was deleted due to funding limitations. With the overrun of rock on the first six breakwaters, there was not enough funds to construct the seventh breakwater. At the completion of six breakwaters, the contractor had 521.6 tons of rock left, which was placed on breakwater six to flatten the side slopes. This was accomplished for a lump sum price of \$24,516 (which equals \$47.00/ton), which resulted in a net reduction in the contract of \$26,824.

10. Pipeline and other utility crossings.

<u>Structure</u>	<u>Owner</u>	<u>Rep. To Contact</u>
NONE	-----	-----

11. Safety and Accidents.

No accidents were observed or reported during the duration of the contract.

12. Additional comments pertaining to construction, completed project, etc.

See attached NRCS Supplement

13. Significant Construction Dates:

Bid I.D. (Construction, 50-7217-1-4)	Date
Bid Opening	4/24/2001
Construction Contract Award	7/20/2001
Preconstruction Conference	8/14/2001
Notice to Proceed	8/28/2001
Mobilization	9/17/2001
Construction Start	9/17/2001
Construction Completion	11/6/2001
Final Acceptance	11/6/2001

If different bids are taken, repeat this table to individually reflect each bid and attach tables.

Other significant Project Dates

	<u>Date</u>
Project Implementation closeout**	
Start of Preconstruction Monitoring***	
Preconstruction Aerial Photography Acquisition***	
Monitoring Plan Completion***	

**** Final implementation closeout is made by either the DNR Project Manager or the Federal Agency Contracting Officer depending on which organization had lead role for construction of project.**

***** To be completed by DNR Project Manager.**

NRCS SUPPLEMENT TO COMPLETION REPORT

CONTRACT ADMINISTRATION

List any significant problems encountered in the administration of the construction contract and recommended solution for future contract of like nature.

DESCRIPTION OF PROBLEM ENCOUNTERED	RECOMMENDATIONS FOR FUTURE CONTRACTS
1. Available funds for construction was within approximately \$5,100 of the bid price with all of the additives. The contract was awarded for all of the additives, which left little room for quantity variations or any changes, which might be necessary.	When the bid amount and available funds are extremely close and additives are in the contract, avoid awarding all of the additives to allow for quantity variations, etc. that may occur during construction.

CONSTRUCTION PLANS

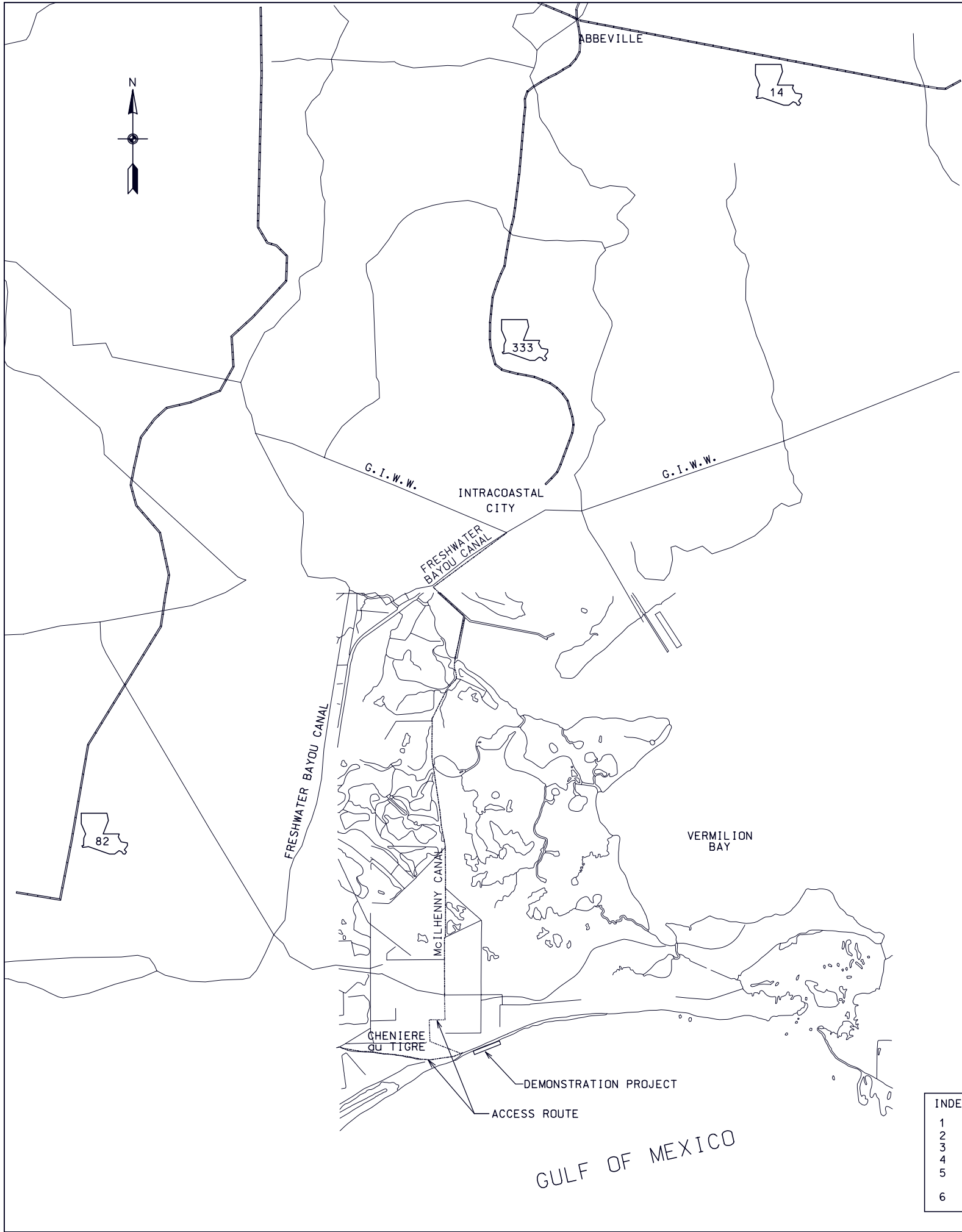
List any items pertinent to the plans which caused problems, need clarification or changes for future contracts of this nature.

DESCRIPTION OF ITEM IN PLANS	RECOMMENDATIONS FOR FUTURE CONTRACTS
1. Used an older control point on the plans and this was updated during construction when DNR provided updated monument.	Try to coordinate in the planning phase or as early as possible in the design phase to get DNR to establish control in the project area.
2. The text over the photographic background is hard to read.	Change text colors to provide greater contrast when overlaying a photographic background

GENERAL COMMENTS

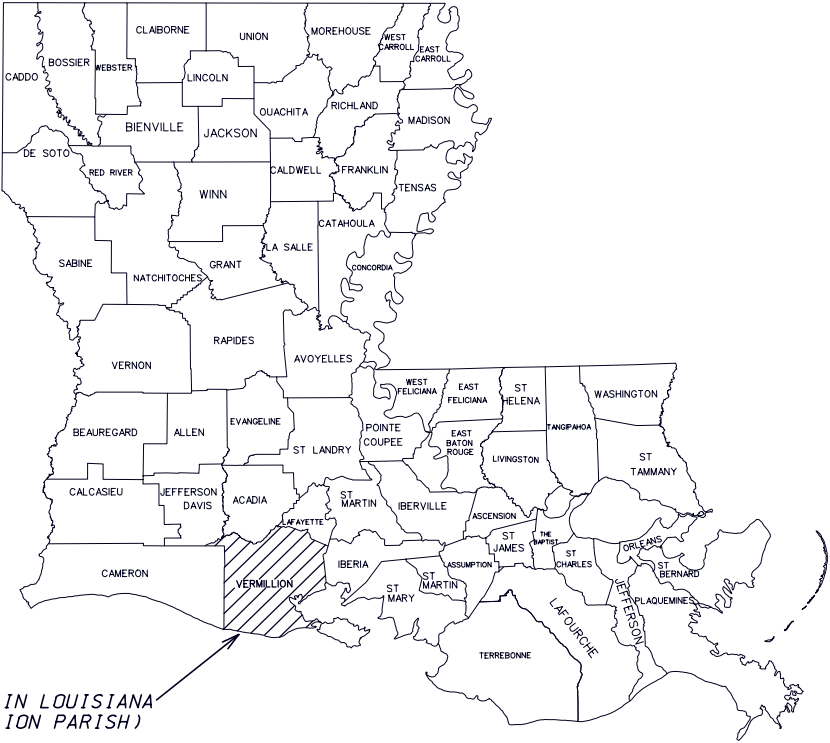
List any significant items which worked well and should be repeated or which caused problems, need clarification or changes for future contracts of this nature.

DESCRIPTION OF ITEM	RECOMMENDATIONS FOR FUTURE CONTRACTS
1. There was limited competition for this project, only 1 bid received.	Several contractors commented on the limited access to the site required smaller equipment. The possibility of increasing floatation access channels to a maximum of 80' width may allow an increase in competition for rock type construction.



CHENIERE AU TIGRE
DEMONSTRATION PROJECT
(TV-16)
BUILT UNDER THE COASTAL WETLANDS
PLANNING, PROTECTION, & RESTORATION ACT
PUBLIC LAW 101-646

BY
VERMILION PARISH POLICE JURY
VERMILION SOIL & WATER CONSERVATION DISTRICT
LOUISIANA DEPARTMENT OF NATURAL RESOURCES
WITH THE ASSISTANCE OF
NATURAL RESOURCES CONSERVATION SERVICE
OF THE
U.S. DEPARTMENT OF AGRICULTURE
2001



- LEGEND
- STATE HIGHWAY
 - PARISH BOUNDARY
 - ACCESS ROUTE

CONTRACT NO. 50-7217-1-7 DATE JULY 20, 2001
CONTRACTOR BERTUCCI CONTRACTING CORP.
INSPECTOR GARY PRIoux
DATE OF COMPLETION 11/06/2001

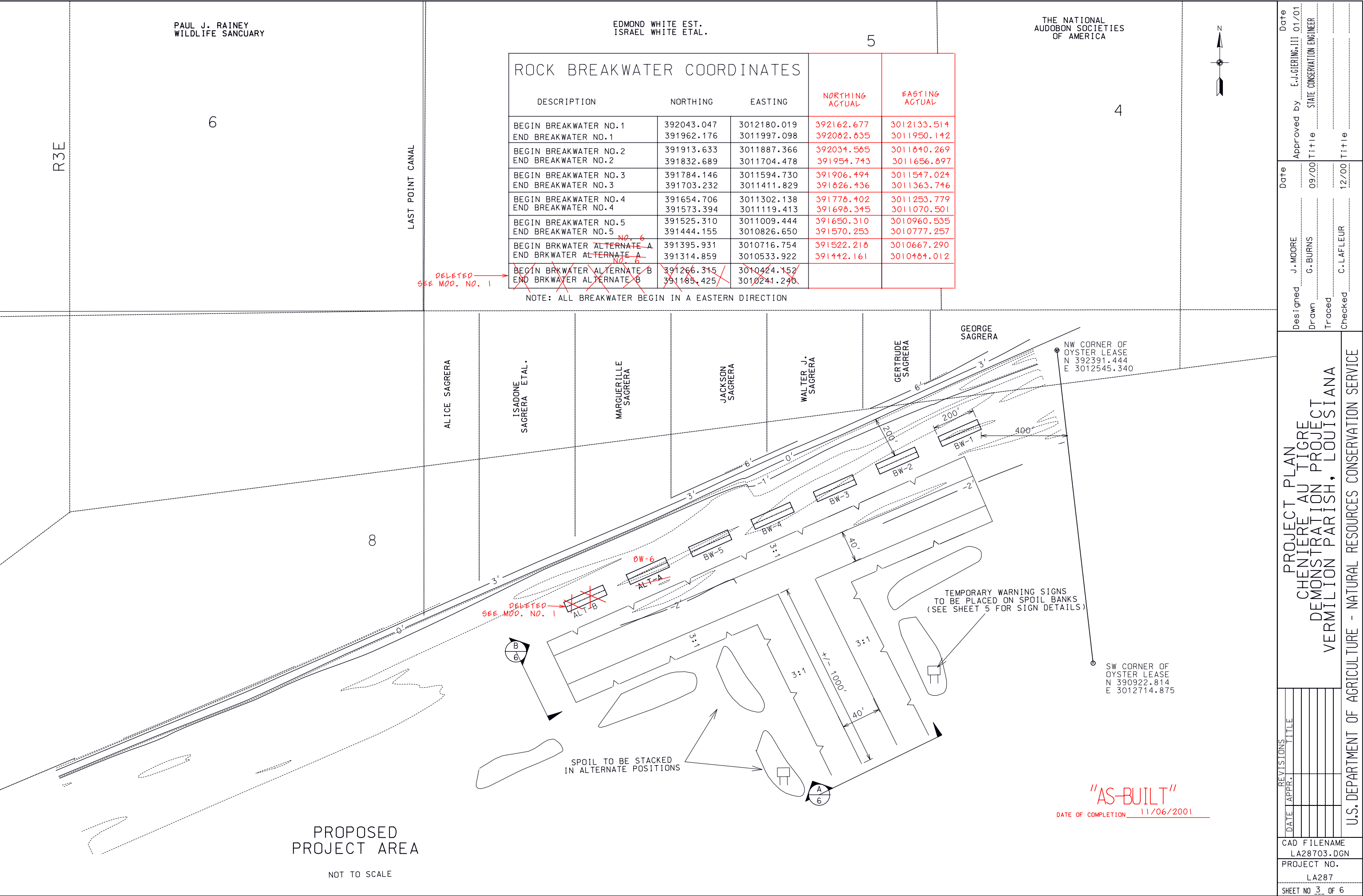
"AS-BUILT"
DATE OF COMPLETION 11/06/2001

- INDEX TO DRAWINGS
- 1 COVER SHEET & LOCATION MAP
 - 2 LAND RIGHTS & ACCESS PLAN
 - 3 PROJECT PLAN
 - 4 DETAILS- ROCK BREAKWATER
 - 5 DETAILS-SETTLEMENT PLATE & TEMPORARY SIGNS
 - 6 DETAILS-FLOTATION ACCESS

"AS-BUILT PLANS"

SUBMITTED BY: WAYNE MELANGON 2/04/02
GOVERNMENT REPRESENTATIVE DATE
APPROVED BY: BRADLEY A. STICKER 3/11/02
ASSISTANT STATE CONSERVATION ENGINEER DATE
E. J. GIERING III 3/11/02
STATE CONSERVATION ENGINEER DATE

COVER SHEET & LOCATION MAP CHENIERE AU TIGRE DEMONSTRATION PROJECT VERMILION PARISH, LOUISIANA		DESIGNED J. MOORE	DATE 09/00	APPROVED BY E. J. GIERING III	DATE 01/01
		DRAWN G. BURNS	DATE 09/00	TITLE STATE CONSERVATION ENGINEER	
		TRACED C. LAFLEUR	DATE 12/00		
		CHECKED C. LAFLEUR	DATE 12/00		
U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE					
CAD FILENAME LA28701.DGN					
PROJECT NO. LA287					
SHEET NO 1 OF 6					



(2) SETTLEMENT PLATES
PER BREAKWATER



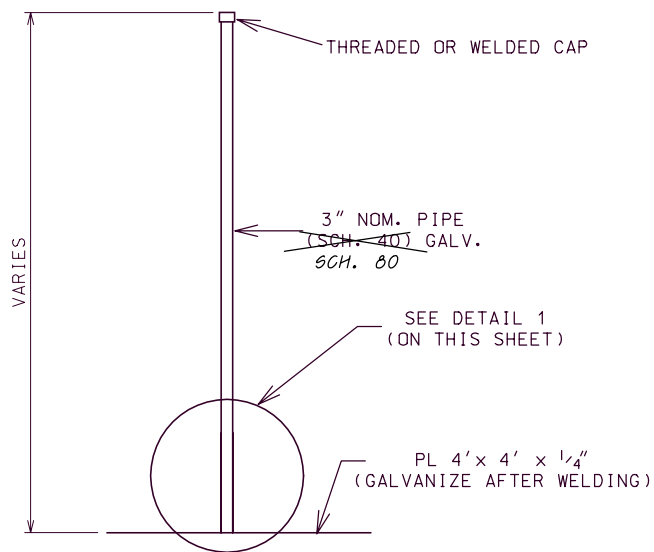
TYPICAL BREAKWATER SECTION

DATE OF COMPLETION 11/06/2001

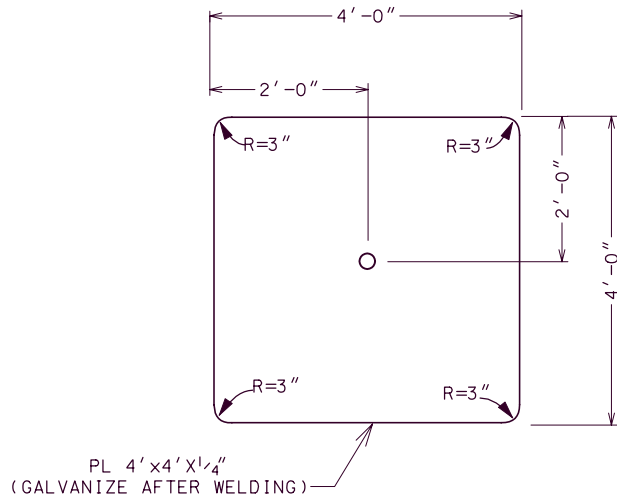
NOTE:
See sheet 5 for Settlement Plate Details

NOT TO SCALE

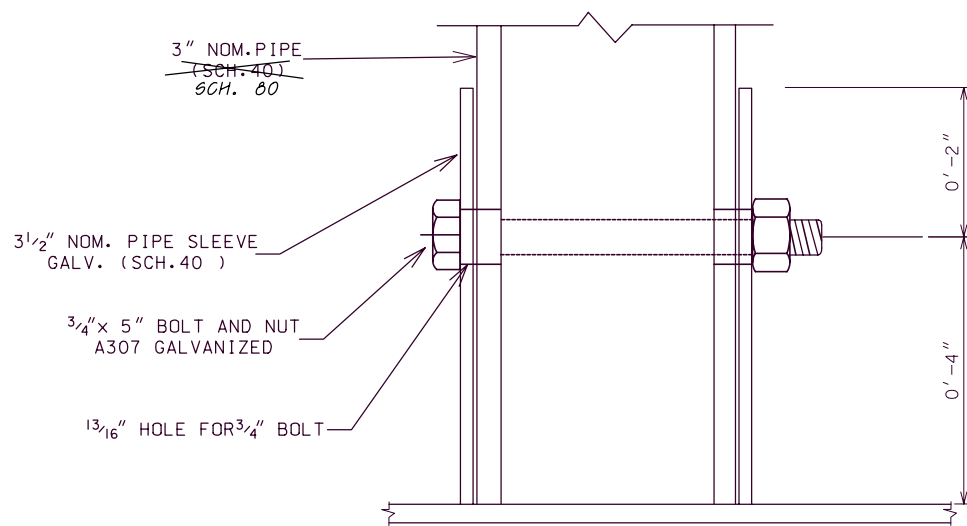
CAD FILENAME LA28704.DGN		DETAILS - ROCK BREAKWATER CHENIER AU TIGRE DEMONSTRATION PROJECT VERMILION PARISH, LOUISIANA				Date 09/00 Designed J. MOORE Drawn G. BURNS Traced Checked C. LAFLEUR 12/00 Title		Date Approved by E. J. GIERING, III 01/01 Title STATE CONSERVATION ENGINEER	
PROJECT NO. LA287		U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE							
SHEET NO. 4 OF 6		REVISIONS							
		NO. DATE APPR.		TITLE					



ELEVATION VIEW

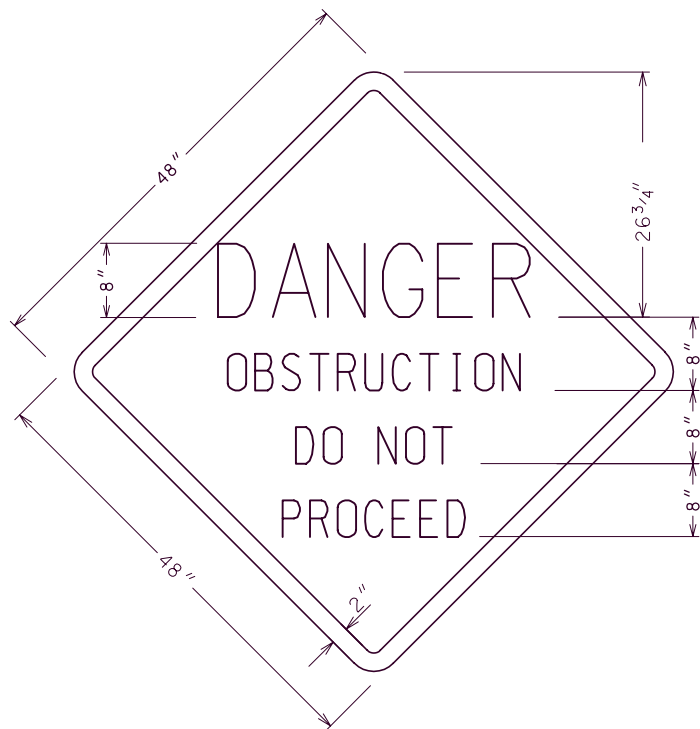


PLAN VIEW

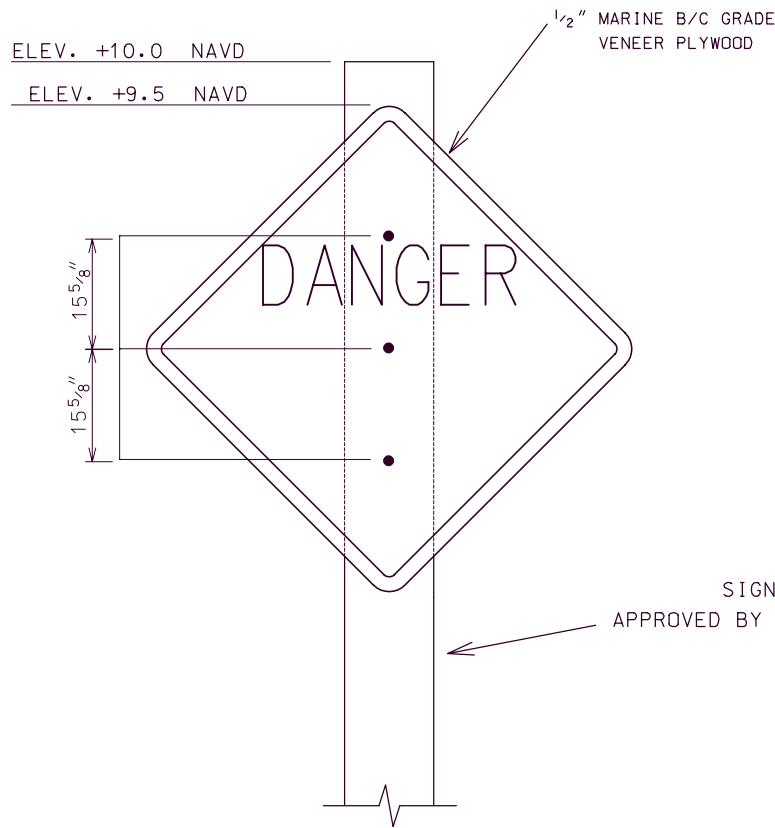


DETAIL 1-PIPE SLEEVE

SETTLEMENT PLATE DETAILS



TYPE "A" SIGN DETAIL



ELEVATION VIEW

(SIGN TYPE A: SUPPORT TYPE)

NOTE:

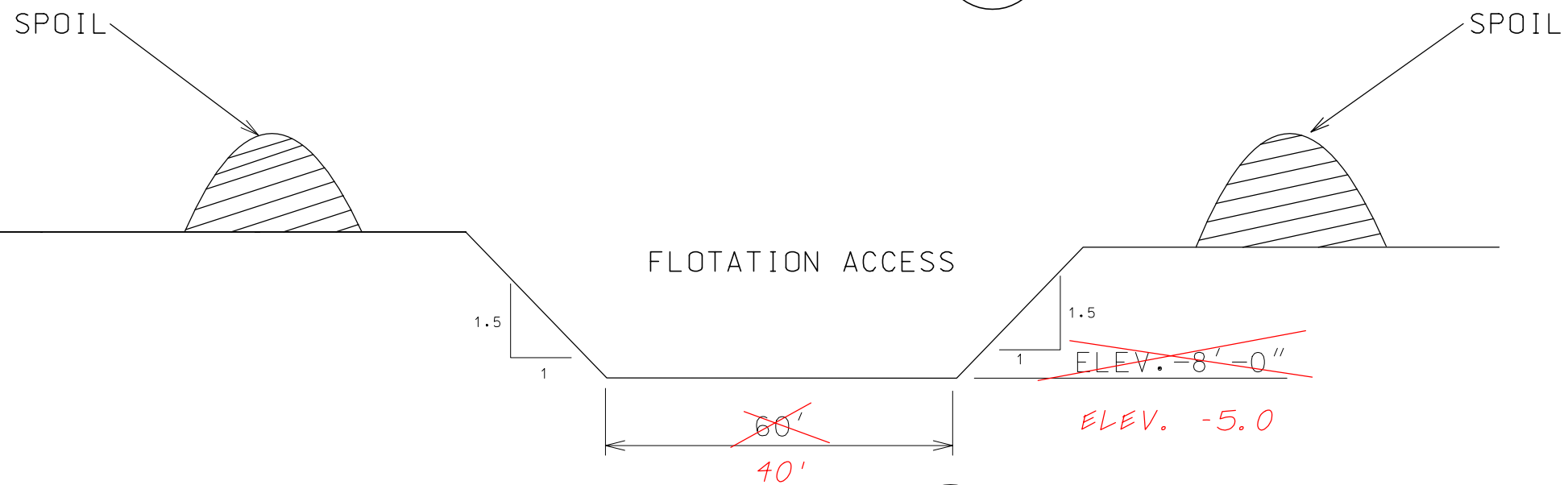
TYPE "A" TEMPORARY SIGNS SHALL BE FIRST PRIMED ON THE B SIDE OF THE PLYWOOD WITH TWO(2) COATS OF A LIGHT PIGMENT, PERMANENT OIL-BASED PRIMER. THE TOP COAT SHALL BE AN OIL-BASED BRILLIANT WHITE. THE LETTERING ON THESE SIGNS SHALL BE BLACK. THE 2" BORDER ON THE TYPE "A" WARNING SIGN SHALL BE A REFLECTIVE MATERIAL OF ORANGE COLOR.

"AS-BUILT"
DATE OF COMPLETION 11/06/2001

NOT TO SCALE

REVISIONS		TITLE		U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE	
NO.	DATE	APPR.	TITLE		
CAD FILENAME					
LA28705.DGN					
PROJECT NO.					
LA287					
SHEET NO. 5 OF 6					

Designed	J. MOORE	Date	9/00
Drawn	G. BURNS	Approved by	E. J. GIERING, III 01/01
Traced	C. LAFLEUR	Title	STATE CONSERVATION ENGINEER
Checked		Title	




All spoil shall be pulled back into the Flotation Access Channel upon completion of the work.

FLOTATION

ACCESS DETAIL

FLOTATION ACCESS DETAIL



"AS-BUILT"

DATE OF COMPLETION 11/06/2001

NOT TO SCALE

REVISIONS					
NO.	DATE	APPR.	TITLE		

CAD FILENAME
LA28706.DGN
PROJECT NO.
LA287
SHEET NO 6 OF 6

CAD FILENAME
LA28706.DGN

PROJECT NO.

LA287

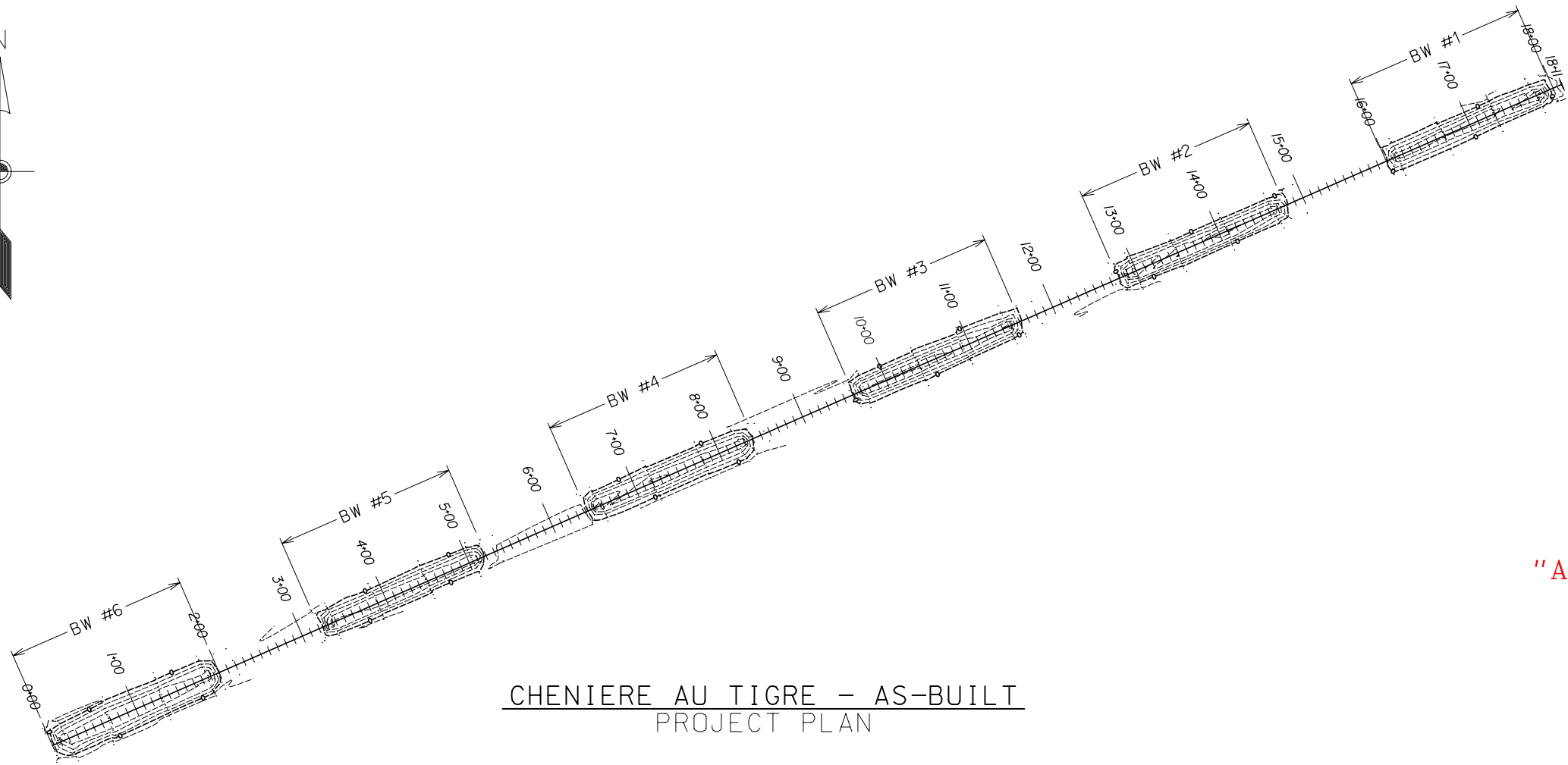
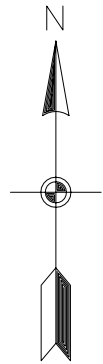
SHEET NO 6 OF 6

DETAIL- FLOTATION ACCESS
CHENIERE AU TIGRE
DEMONSTRATION PROJECT
VERMILION PARISH, LOUISIANA

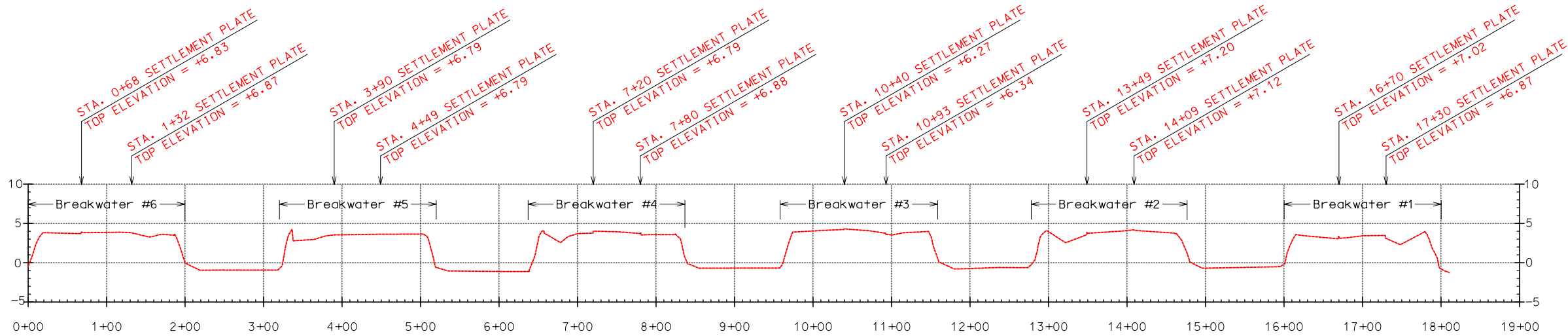
ATURE - NATURAL RESOURCES CONSERVATION SERVICE

U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE

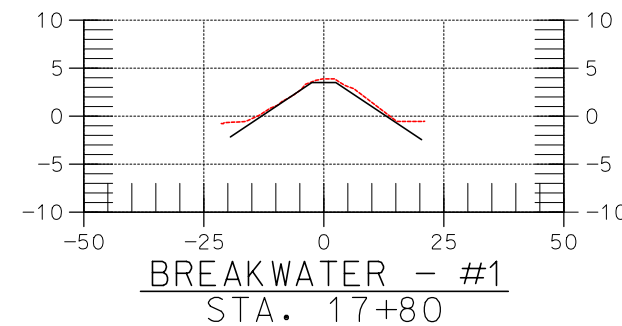
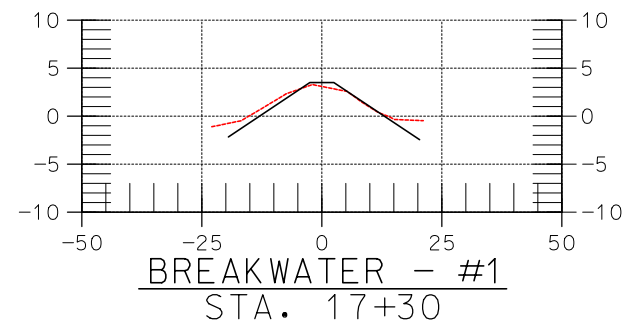
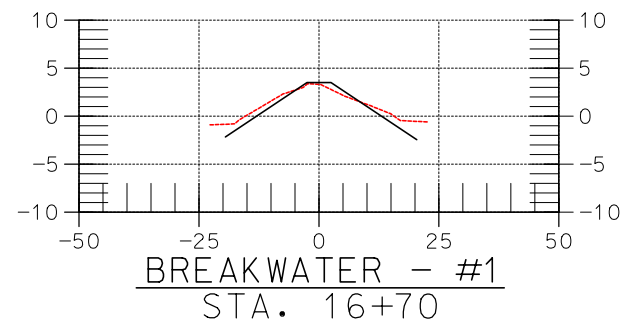
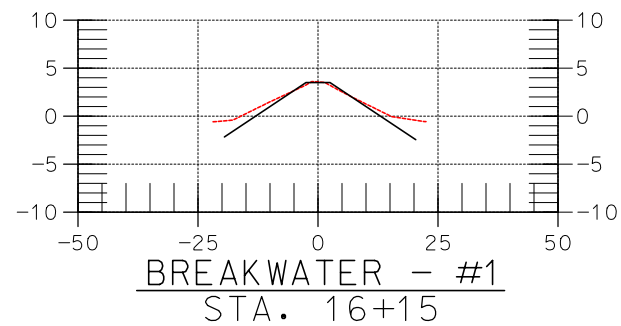
	Date	Date
Designed J. MOORE	09/00	Approved by E.J. GIERING III 01/01
Drawn G. BURNS	09/00	Title STATE CONSERVATION ENGINEER
Traced		
Checked C. LAFLEUR	12/00	Title



"AS-BUILT"



REVISIONS		AS-BUILT - PLAN & PROFILE CHENIERE AU TIGRE - TV-16 DEMONSTRATION PROJECT VERMILION PARISH, LOUISIANA	Designed J. MOORE Drawn A. J. Gremillion Traced Checked B. STICKER	Date 09/00	Approved by E.J. GIERING III	Date 03/02
DATE	APPR.			TITLE		
U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE			Title			
CAD FILE NO. LA287006A1						
DRAWING NO. LA-287						
SHEET NO 6A10F 6						



"AS-BUILT"

[illegible]

AS-BUILT - CROSS SECTIONS
CHENIERE AU TIGRE - TV-16
DEMONSTRATION PROJECT
VERMILION PARISH, LOUISIANA

REVISIONS		TITLE
DATE	APPR.	
		AS-BUILT - CROSS SECTIONS
		CHENIERE AU TIGRE - TV-16
		DEMONSTRATION PROJECT
		VERMILION PARISH, LOUISIANA
U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE		

CAD FILE NO.	1a287006A3
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DRAWING NO.
LA-287

SHEET NO 6_A_30F 6

	Date
Designed	J. Moore 09/00
Drawn	A. J. Gremillion 03/02
Traced	
Checked	B. Sticker 03/02

	Date
Designed	J. Moore 09/00
Drawn	A. J. Gremillion 03/02
Traced	
Checked	B. Sticker 03/02

	Date
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